

## ABSTRACT OF THE DISCLOSURE

A scramble control method allowing synchronization of scramblers and descramblers without resetting them per frame. The scramblers are simultaneously reset and the descramblers are simultaneously reset. The scramblers are simultaneously initialized at a first time point and thereafter are not reset. The descramblers are simultaneously initialized after an elapse of a time period required for transferring a frame from an input interface to an appropriate output interface through the switch, and thereafter the descramblers are not reset. Alternatively, a scrambler state indicating a pseudorandom pattern is generated at predetermined intervals and is sent to the scramblers and the descrambler.